What is claimed:

1. In a bicycle having a frame, an axle mounted on said frame, a rear wheel mounted on said axle, a crankshaft on said frame, said crankshaft having a pair of pedals whereby said crankshaft can be rotated by the movement of the rider's legs and feet, a chain drive between said crankshaft and said axle, and a one-way clutch whereby said crankshaft is drivingly engaged to said axle for rotation in only one direction, the improvement comprising

a second drive between said axle and said crankshaft,

said second drive imparting rotational force from said crankshaft to said axle independent of said chain drive,

said second drive having reversing means for reversing a direction of rotation of said crankshaft with respect to a direction of rotation of said axle, and

a manually operable clutch for selectively engaging and disengaging said second drive.

2. The improvement of claim 1 wherein said reversing means further comprises a pair of gears in engagement with each other.

3. The improvement of claim 1 wherein said second drive further comprising an idler shaft, a second chain and first and second sprockets on said idler shaft and on said rear axle respectively.

4. The improvement of claim 3 wherein said second chain drive is positioned on an opposite side of said frame from said chain drive.

5. The improvement of claim 4 wherein said reversing means is a pair of gears in engagement with each other.

6. The improvement of claim 5 wherein said clutch engages and disengages said pair of gears.

7. A bicycle comprising

a frame,

a crankshaft on said frame,

a pair of pedals mounted on ends of said crankshaft,

a first chain drive for drivingly engaging said crankshaft with said axle,

one way clutch means on said first chain drive for applying rotational force to said axle in one direction only,

a second chain drive between said crankshaft and said axle,

said second chain drive for imparting rotational force from said crankshaft to said axle independent of said first chain drive,

said second chain drive including reversing means for reversing a direction of rotation of said crank with respect to said axle, and

manually operable clutch means for selectively engaging and disengaging said second chain drive.

8. In a bicycle having a frame, a crankshaft on said frame, said crankshaft having a pair of pedals whereby said crankshaft can be rotated by the movement of a rider's legs and feet, a rear axle, a chain drive between said crankshaft and said rear axle, said rear axle having an inner axle with a first end drivingly connected to said chain drive and a second end, a tubular outer axle concentric with said inner axle, and a one-way clutch between said inner axle and said outer axle whereby said chain drive is drivingly engaged to said outer axle for rotation in only one direction, the improvement comprising

a clutch between said inner axle and said outer axle,

means for a urging said clutch out of engagement wherein said inner axle is engaged with said outer axle only through said one way clutch, and

means for urging said clutch into engagement wherein said chain drive is engaged with said outer axle for rotation in both directions.

9. In a bicycle having a frame, an axle mounted on said frame, a rear wheel mounted on said axle, a crankshaft on said frame, said crankshaft having a pair of pedals whereby said crankshaft can be rotated by the movement of the rider's legs and feet, a chain drive between said crankshaft and said axle, and a one-way clutch whereby said crankshaft is drivingly engaged to said axle for applying rotational force for rotating said rear wheel in only a first direction, the improvement comprising

means for applying rotational force from said crankshaft to said axle in a second direction, and

a manually operable clutch for selectively engaging and disengaging said means.

10. In a bicycle having a frame, an axle mounted on said frame, a rear wheel mounted on said axle, a crankshaft on said frame, said crankshaft having a pair of pedals whereby said crankshaft can be rotated by the movement of the rider's legs and feet, a chain drive between said crankshaft and said axle, and a one-way clutch whereby said crankshaft is drivingly engaged to said axle for applying rotational force from said crankshaft to said rear wheel in only a first direction wherein rotation in said first direction causes forward movement of said bicycle, the improvement comprising

means for applying rotational force from said rear wheel to said crankshaft while said rear wheel is rotating in said first direction, and

a manually operable clutch for selectively engaging and disengaging said means.